Eata Battery

Tin Oxide Nanopowder (SnO_2)

Catlog Number: BMAM-0033

Description

High-purity tin oxide nanoparticles for lithium-ion anodes, offering high capacity through a combination of conversion and alloying reactions.

Basic Information

Chemical Formula: SnO_2

Appearance: Off-White Powder

D50 Particle Size: 50 - 100 nm

Tap Density: ≥ 0.8 g/cm³

BET Surface Area: 30 - 60 m²/g

1st Discharge Capacity: ≥ 700 mAh/g

1st Coulombic Efficiency: ≥ 75%

Carbon Content: N/A

Active Metal Content: Sn: ~78%

Ash Content: ≤ 0.10%

Moisture Content: ≤ 0.15%

pH Value: 5.0 - 7.0

Iron (Fe) Impurity: ≤ 40 ppm

True Density: 6.9 - 7.0 g/cm³

Compaction Density: N/A

Crystal Structure: Tetragonal

Surface Coating: Oxide layer

Magnetic Impurities: ≤ 50 ppb

Electronic Conductivity: ~10^{-4} S/cm

Voltage Range: 0.01 - 2.0 V

Purity: ≥ 99.9%

Primary Application: High-capacity anodes

Thermal Stability: Moderate

Cycle Life: ≥ 300 cycles

Tel: 1-631-637-0420 | 1-631-533-0595
Email: info@eataray.com
Suite 103, 17 Ramsey Road, Shirley, NY 11967, USA